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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2011 Office of Secretary Of Defense	<b>DATE:</b> February 2010
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0605790D8Z: <i>SBIR/Challenge Admin</i>
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<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	5.568	4.645	2.189	0.000	2.189	2.237	2.286	2.321	2.354	Continuing	Continuing
P518: <i>SBIR/Challenge Admin</i>	5.568	4.645	2.189	0.000	2.189	2.237	2.286	2.321	2.354	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

(U) This Program Element (PE) provides funding for the administration of the Department of Defense (DoD) Small Business Innovation Research (SBIR) Program and the Small Business Technology Transfer (STTR) Program. The SBIR/STTR Program funds over one billion dollars annually in mission oriented research and development projects at small technology companies. The purpose of the program is to stimulate the development of new technologies to improve U.S. military and economic capabilities. The SBIR/STTR Program is mandated by public laws (PL) 97-219, PL 99-443, PL 102-564, PL 106-554, PL 107-50, PL 111-10, PL 111-43, PL 111-66 and PL 111-84 and is codified in 15 USC 638. The SBIR/STTR Program competitively funds scientific and technical innovation to specifically address the needs of participating DoD components.

(U) DoD components participating in the SBIR Program include the: Army , Navy, Air Force, Defense Advanced Research Projects Agency (DARPA), Missile Defense Agency (MDA), Defense Threat Reduction Agency (DTRA), U.S. Special Operations Command (SOCOM), Joint Science & Technology Office for Chemical & Biological Defense, National Geospatial-Intelligence Agency (NGA), the Defense Logistics Agency (DLA), the Defense MicroElectronics Activity (DMEA) and the Office of Secretary of Defense (OSD) through the Director, Defense Research & Engineering (DDR&E). DoD components participating in the STTR Program include the: Army, Navy, Air Force, DARPA, MDA, and OSD.

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<p><b><u>B. Program Change Summary (\$ in Millions)</u></b></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;"></th> <th style="width:10%; text-align: right;"><u>FY 2009</u></th> <th style="width:10%; text-align: right;"><u>FY 2010</u></th> <th style="width:10%; text-align: right;"><u>FY 2011 Base</u></th> <th style="width:10%; text-align: right;"><u>FY 2011 OCO</u></th> <th style="width:10%; text-align: right;"><u>FY 2011 Total</u></th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget</td> <td style="text-align: right;">2.165</td> <td style="text-align: right;">2.163</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>Current President's Budget</td> <td style="text-align: right;">5.568</td> <td style="text-align: right;">4.645</td> <td style="text-align: right;">2.189</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">2.189</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right;">3.403</td> <td style="text-align: right;">2.482</td> <td style="text-align: right;">2.189</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">2.189</td> </tr> <tr> <td>    • Congressional General Reductions</td> <td></td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    • Congressional Directed Reductions</td> <td></td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    • Congressional Rescissions</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    • Congressional Adds</td> <td></td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    • Congressional Directed Transfers</td> <td></td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    • Reprogrammings</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    • SBIR/STTR Transfer</td> <td style="text-align: right;">-0.160</td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    • Congressssional Adds (See Note Below)</td> <td style="text-align: right;">3.600</td> <td style="text-align: right;">2.520</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>    • Other Program Adjustments</td> <td style="text-align: right;">-0.037</td> <td style="text-align: right;">-0.038</td> <td style="text-align: right;">2.189</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">2.189</td> </tr> </tbody> </table> <p><b><u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u></b></p> <table style="width:100%; 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Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605790D8Z: SBIR/Challenge Admin				PROJECT P518: SBIR/Challenge Admin			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
P518: SBIR/Challenge Admin	5.568	4.645	2.189	0.000	2.189	2.237	2.286	2.321	2.354	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
(U) The SBIR/STTR Program is executed in three phases. The purpose of Phase I is to determine, insofar as possible, the scientific technical and commercial merit, and feasibility of ideas submitted under the SBIR/STTR Program. Phase II awards are made to firms that have been awarded a Phase I contract on the basis of the results of their Phase I effort and the scientific, technical, and commercial merit of the Phase II proposal. Phase II is the principal research or research and development effort and is expected to produce a well-defined deliverable prototype. Phase III SBIR/STTR efforts derive from, extend or conclude Phase I or Phase II efforts, and are not funded with SBIR/STTR funds. Under Phase III, companies participating in the SBIR/STTR Program are expected to obtain funding from the private sector and/or non-SBIR/STTR government sources to develop the prototype into a viable product or non-R&D service for sale in military and/or private sector markets.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SBIR/Challenge Admin							1.968	2.125	2.189	0.000	2.189
(U) Public law mandating SBIR/STTR prohibits the use of any of the SBIR/STTR budget to fund administrative costs of the program, therefore program element (PE) 0605790D8Z is the only source of funds for the coordination, administration and execution of the Department's SBIR/STTR Program. In addition to funding costs for program administration, coordination and execution, PE 0605790D8Z funds essential elements of the SBIR/STTR Program that are required by law including: (a) the development and maintenance of information systems and software required for the measurement, evaluation, and effective management of the Department's SBIR/STTR R&D Program; (b) outreach to small technology companies, potential investors in such companies, SDBs WOSBs HBCU/MIs and others, to encourage and facilitate their participation in the SBIR/STTR Programs (e.g. conferences, trade shows, etc.); (c) preparation of the SBIR/STTR R&D solicitations and related publications; (d) support efforts such as administration of the various SBIR/STTR process action teams; (e) development and promulgation of											

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
guidance and reference materials to DoD contracting officers, technical monitors, and other personnel involved in administering the SBIR/STTR Programs; and (f) responding to requests for information relative to DoDs SBIR/STTR Program that receives about 13,000 proposals yearly and issues over 3,000 contracts.						
FY 2009 Accomplishments: (U) FY 2009 accomplishments included program administration, coordination and execution of the DoD SBIR/STTR Program. Specifically, managed the execution of the \$1.374B FY 2009 DoD SBIR/STTR budget between 11 DoD Components to include: 1) Coordinated and executed the administrative portions of the DoD SBIR/STTR Programs - administered the online topic development tool, developed five SBIR/STTR solicitations, and received and distributed over 13,000 SBIR/STTR proposals; 2) Maintained and modified automated processes across the entire SBIR/STTR lifecycle – maintained systems included topic development, proposal submission, company commercialization, awards, commercialization pilot program, and data exchange; 3) Implemented an aggressive outreach program - developed and implemented outreach materials, hosted a 3-day Training Workshop, hosted a 3-day Beyond Phase II Conference and Technology Showcase, maintained an SBIR/STTR Help Desk, maintained an on-line Desk Reference Manual, administered the SBIR/STTR Interactive Topic Information System (SITIS), and maintained mailing lists (listserv) targeting specific outreach groups; 4) Coordinated oversight, collected results, tracked execution and provided reporting of Phase III technology transition management and support of the DoD SBIR Commercialization Pilot Program (CPP) (section 252 of the NDAA for FY 2006) - managed and maintained the CPP database and provided data for draft annual CPP Report ; and 5) Generated all reports required of the SBIR/STTR Programs as mandated by law and policy - annual SBIR/STTR Report, Nanotechnology Report, and Encouraging Innovation in Manufacturing Report.						

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: (U) FY 2010 plan includes program administration, coordination and execution of the DoD SBIR/STTR Program. Specifically, manage the execution of the FY 2010 DoD SBIR/STTR budget between 11 DoD Components to include: 1) Coordinate and execute the administrative portions of the DoD SBIR/STTR Programs; 2) Maintain and modify automated processes across the entire SBIR/STTR lifecycle; 3) Implement an aggressive outreach program; 4) Coordinate oversight, collect results, track execution and provide reporting of Phase III technology transition management and support of the DoD SBIR Commercialization Pilot Program (CPP) (section 252 of the NDAA for FY 2006); and 5) Generate all reports required of the SBIR/STTR Programs as mandated by law and policy.					
FY 2011 Base Plans: (U) FY 2011 plan includes program administration, coordination and execution of the DoD SBIR/STTR Program. Specifically, manage the execution of the FY 2011 DoD SBIR/STTR budget between 11 DoD Components to include: 1) Coordinate and execute the administrative portions of the DoD SBIR/STTR Programs; 2) Maintain and modify automated processes across the entire SBIR/STTR lifecycle; 3) Implement an aggressive outreach program; 4) Coordinate oversight, collect results, track execution and provide reporting of Phase III technology transition management and support of the DoD SBIR Commercialization Pilot Program (CPP) (section 252 of the NDAA for FY 2006); and 5) Generate all reports required of the SBIR/STTR Programs as mandated by law and policy.					
Accomplishments/Planned Programs Subtotals	1.968	2.125	2.189	0.000	2.189

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>		
	<b>FY 2009</b>	<b>FY 2010</b>
Congressional Add: UAV Directed Energy Weapon System Payloads  <i>FY 2009 Accomplishments:</i> (U) Administered by the Department of the Army, this project developed a non-lethal directed energy weapon (DEW) technology based on radio frequency directed energy. This technology specifically targets the disruption or destruction of electronic systems such as communications, computers, sensors, and remote triggering devices which may be employed in improvised explosive devices.  <i>FY 2010 Plans:</i> (U) Continue FY09 efforts to support the incorporation of new technologies and techniques into the existing design to enhance DEW capabilities.	0.800	1.000
Congressional Add: Random Obfuscating Compiler Anti-Tamper Software  <i>FY 2009 Accomplishments:</i> (U) Administered by the Department of the Air Force, this project developed a product for secure distribution and execution of critical DoD software applications and data in a hostile environment. FY09 funding supported the development of state-of-the-art software protection technology to support real-time processing and operations.  <i>FY 2010 Plans:</i> (U) Continue FY09 efforts to include the integration of additional anti-tamper solutions.	1.600	1.520
Congressional Add: Ferroelectric Component Technology  <i>FY 2009 Accomplishments:</i> (U) Administered by the Department of Army, this project developed a 95/5 PZT shock discharged element for the Intense electroMagnetic Pulse weapon (IMP), an RF grenade designed to disrupt	1.200	0.000

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>		
	<b>FY 2009</b>	<b>FY 2010</b>
or destroy electric circuits and components. FY09 funds supported the fabrication of ferroelectric generators using a pilot production process.		
Congressional Adds Subtotals	3.600	2.520
<b>C. Other Program Funding Summary (\$ in Millions)</b>		
N/A		
<b>D. Acquisition Strategy</b>		
Not applicable for this item.		
<b>E. Performance Metrics</b>		
(U) Performance is in support of the administration of the program and compliance with statutory requirements.		
(U) For PE 0605790D8Z, management and administration of the DoD SBIR/STTR Programs, the following measures have been established to meet requirements as mandated by law: 1) Coordinate and execute the administrative portions of the DoD SBIR/STTR Programs; 2) Maintain and modify automated processes across the entire SBIR/STTR lifecycle; 3) Develop and conduct an aggressive outreach program; 4) Coordinate oversight, collect results, track execution and provide reporting of Phase III technology transition management and support of the DoD SBIR Commercialization Pilot Program (CPP) (section 252 of the NDAA for FY 2006); and 5) Generate all reports required of the SBIR/STTR Programs as mandated by law and policy.		

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